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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/227,770	01/08/1999	SURESH NARAYANA CHARI	YO999-002	7725

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IBM CORPORATION
INTELLECTUAL PROPERTY LAW DEPT
P O BOX 218
YORKTOWN HEIGHTS, NY 10598

EXAMINER

JACKSON, JENISE E

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 04/27/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/227,770

Applicant(s)

CHARI ET AL.

Examiner

Jenise E Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-7,13-26,30-36,38-40,42-44 and 46-59 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-25, 40,44, 49-59 is/are allowed.
- 6) ☒ Claim(s) 1,7,14-16,26,32-36,38,39,42 and 46-48 is/are rejected.
- 7) ☒ Claim(s) 8-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 7, 14-16, 26, 30-36, 38-39, 42-43, 46-48, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cashman et al.

3. As per claims 1, 26, 35-36, 38, 39, 43, Cashman discloses embedding a secure coprocessor(100) for use as an agent of the client(108), and server(107)(see fig. 1, sheet 1, see col. 7, lines 48-65), employing a proxy(i.e. network device)(104) between the client and the server to provide connection links between the client and server(see fig. 1, sheet 1), the coprocessor(100) acting as converter between at least one protocol the client(108) supports and at least one other protocol supported by the server(107), the Examiner asserts that Cashman discloses this because Cashman discloses that the coprocessor(100) can implement protocols on data in both the sending and receiving directions(see col. 8, lines 29-32), and employing respective security protocols of the at least one protocol and the at least one other protocol; the Examiner asserts that security protocol is broadly interpreted to be any protocol that is security related. Therefore, Cashman discloses employing respective security protocols of the at least one protocol and the at least one other protocol, because Cashman discloses that the coprocessor(100) performs protocols such as encryption and decryption(see col. 8, lines 19-20, col. 13, lines 27-29). Further, Cashman discloses splicing a plurality of secure communication protocols of different protocol suites into the agent, because Cashman discloses that the

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coprocessor can be programmed for multiple protocols(see col. 3, lines 44-48, col. 4, lines 39-50), and guarantees that an application(inherent), embedded in the coprocessor performs to a degree of security proscribed by the client and/or server(see col. 8, lines 6-26). Cashman discloses the proxy cannot tamper with the functioning of the agent the agent being a software program or hardware logic operating within the confines of the coprocessor(see col. 8, lines 24-26), because Cashman discloses that the coprocessor handles and performs protocols, and Cashman does not disclose the proxy handling the coprocessor's job, thus the proxy does not tamper with the functioning of the agent.

4. As per claim 5, Cashman discloses wherein the client is a pervasive computing device(see col. 7, lines 48-65).

5. As per claim 6, Cashman et al. discloses the step of adapting content supplied by the client to fit constraints of the server and/or the connection links(see col. 8, lines 1-18).

As per claim 7, Cashman discloses securely embedding an agent at a proxy in the network(see fig. 1, sheet 1, col. 8, lines 24-26), and splicing a plurality of secure communication protocols of different protocol suites into the agent(see col. 8, lines 36-38).

6. As per claim 14, Cashman discloses embedding a trusted application is a secure coprocessor at the site of a proxy(see fig. 1, sheet 1, col. 8, lines 24-26); and delegating to a network infrastructure a task of enforcing a trust model(col. 8, lines 1-22).

7. As per claim 15, Cashman discloses that the application is trusted to enforce the trust model between at least one server and plurality of clients(see fig. 1, sheet 1, col. 7, lines 55-60)

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8. As per claim 16, Cashman assuring the tamper resistance of the application, because Cashman does not disclose that the proxy can tamper with the coprocessor. Cashman disclose the proxy handling the coprocessor's job(see col. 8).
9. As per claim 32, Cashman discloses a secure coprocessor located at the site of a proxy(see fig. 1, sheet 1); and a trusted application embedded in the coprocessor wherein the coprocessor delegates the task of enforcing an arbitrary trust model to the application(see col. 8, lines 1-32).
10. As per claims 30-31 rejected under the same basis as claim 6.
11. As per claim 33, it has already been rejected(see claim 15).
12. As per claim 34, it has already been rejected(see claim 16).
13. As per claim 42, it has already been rejected(see claim 7).
14. As per claim 46, it has already been rejected(see claim 14).
15. As per claim 47, it has already been rejected(see claim 15).
16. As per claim 48, it has already been rejected(see claim 16).
17. Claims objected to as being rejected on base claims 8-13,
the reason this claims are objected to is because splicing the specific protocols of WAP to that of IP.
18. Claims 17-25, 49-59, are allowed for the proxy forwarding the n-tuple to the coprocessor; the coprocessor sending the response to the proxy. Claim 40, is allowed because, splicing a security protocol of a wireless applications protocol suite to that of the internet protocol suite. Claim 44 is allowed for the limitation of employing a storage device external to the proxy, and

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using the cryptographic means to encrypt the state of a splicing process resulting from the step of splicing.

Response To Amendment

19. In response to Applicant's remarks, paper #7, dated February 5, 2004, the Applicant states that Cashman discloses that the proxy is trusted to do this protocol translation. The Examiner disagrees with the Applicant. Cashman discloses that the coprocessor does the protocol translation, because Cashman discloses coprocessor(100) performs protocols(see col. 8, lines 19-22, 39-41, col. 9, lines 54-60). Further, Cashman discloses that the coprocessor performs HDLC packet framing, bit-stuffing, CRC, point-to-point, and other protocols(see col. 13, lines 27-36).

20. The Applicant states that the proxy can tamper with what the coprocessor does. The Examiner disagrees with the Applicant. The Applicant is urged to show the Examiner how Cashman discloses that the proxy can tamper with what the coprocessor does. Cashman discloses that the coprocessor is inside the proxy. However, Cashman does not disclose that the proxy can tamper with the coprocessor. Cashman discloses that the coprocessor handles and performs protocols; Cashman does not disclose the proxy handling the coprocessor's job(see col. 8).

21. The Applicant states that Cashman describes a method, which uses a coprocessor to implement elements of the protocol translation process between client and server. Further, the Applicant states the coprocessor in their invention to enforce the trust model between the client and server. Further, the Applicant states that there is no end-to-end security. The Examiner

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disagrees(see pg. 2, previous rejection). Cashman discloses end-to-end security, because Cashman discloses encrypting and decrypting packets(see col. 8).

Conclusion

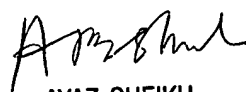
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenise E Jackson whose telephone number is (703) 306-0426. The examiner can normally be reached on M-Th (6:00 a.m. - 3:30 p.m.) alternate Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-0040 for regular communications and (703) 308-6306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



April 13, 2004


AYAZ SHEIKH
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TECHNOLOGY CENTER 2100